The Situational Humour Response Questionnaire (SHRQ) as a test of "sense of humour": a validity study in the field of humour appreciation

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Abstract: The Situational Humour Response Questionnaire [SHRQ, Martin Lefcourt (1984) Journal of Personality and Social Psychology, 47, 145–155] measures the propensity to smile and laugh in a variety of daily life situations. Since the SHRQ is regarded as a test of "sense of humour", its validity in the field of humour appreciation was investigated. Two student samples (N = 105 and 101) from Indiana answered the SHRQ and rated the funniness and aversiveness of one of two sets of 35 jokes and cartoons taken from Form A and Form B of the 3-WD Humour Test [Ruch (1983) Humour Test 3-WD (Form A, B and K). Unpublished Manuscript]. Product-moment correlations between the SHRQ and humour appreciation was computed at the level of funniness and aversiveness for individual items, for humour categories as well as for total scores. Contrary to expectations, the SHRQ did not correlate with any level of 3-WD Humour Test scores suggesting that these two tests apparently tap totally different domains of humour. It may be that the SHRQ measures laughter that is only partially accompanied by the humour experience with that experience being more fully measured in the 3-WD Test. It appears that the SHRQ fails to fulfil the criterion that a test of "sense of humour" should be able to account for individual differences in humour appreciation. A hypothesis is proposed suggesting that the relationship between the SHRQ and humour appreciation might be mediated by social factors.

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THE SITUATIONAL HUMOUR RESPONSE QUESTIONNAIRE (SHRQ) AS A TEST OF "SENSE OF HUMOUR": A VALIDITY STUDY IN THE FIELD OF HUMOUR APPRECIATION.

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Summary—The Situational Humour Response Questionnaire (SHRQ, Martin & Lefcourt, 1984, Journal of Personality and Social Psychology, 47, 145-155) measures the propensity to smile and laugh in a variety of daily life situations. Since the SHRQ is regarded as a test of "sense of humour", its validity in the field of humour appreciation was investigated. Two student samples (N = 105 and 101) from Indiana answered the SHRQ and rated the funniness and aversiveness of one of two sets of 35 jokes and cartoons taken from Form A and Form B of the 3-WD Humour Test (Ruch, 1983, Humour Test 3-WD [Form A, B and K]. Department of Psychology, Düsseldorf, Germany). Product-moment correlations between the SHRQ and humour appreciation was computed at the level of funniness and aversiveness for individual items, for humour categories as well as for total scores. Contrary to expectations, the SHRQ did not correlate with any level of 3-WD Humour Test scores suggesting that these two tests apparently tap totally different domains of humour. It may be that the SHRQ measures a laughter that is only partially accompanied by the humour experience with that experience being more fully measured in the 3-WD Test. It appears that the SHRQ fails to fulfil the criterion that a test of "sense of humour" should be able to account for individual differences in humour appreciation. A hypothesis is proposed suggesting that the relationship between the SHRQ and humour appreciation might be mediated by social factors.

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Humour is a psychological construct, which may be manifested by smiling, laughing and the subjective experience of amusement as measured by rating scales. These indicators of humour correlate positively (Deckers, Kuhlhorst & Freeland, 1987; Pollio & Mers, 1974; Ruch, 1990) and occur in reaction to incongruous stimuli. Observed individual differences in these indicators have been explained by two different strategies. One strategy employed existing personality traits such as conservatism, creativity, extraversion, general intelligence, intolerance of ambiguity and sensation seeking in order to account for individual differences in humour indicators (for reviews see Hehl & Ruch, 1985; Nias, 1985; Ruch, in press). The validity coefficients obtained with this approach are sufficiently high. Furthermore, this approach is parsimonious because it avoids the use of an additional trait such as "sense of

humour". The second strategy tried to account for these individual differences in humour, however, by postulating a separate "sense of humour" trait. It is assumed that individuals differ in their sense of humour and thus differ with respect to the degree they smile or laugh and appreciate humour. Sense of humour, however, has neither an agreed upon definition nor are its dimensionality and scope clear.

Constructing valid measures of a sense of humour trait have proved to be difficult (Ruch, 1990). Some measures have restricted their scope to the appreciation of jokes and cartoons (Almack, 1928; Cattell & Tollefson, 1966; Roback, 1943) while others relied on overt behaviour or the creation of humour (Babad, 1974; Bell, McGhee & Duffey, 1986; Koppel & Sechrest, 1970; Levine & Rakusin, 1959). More recently, developed questionnaires designed to assess sense of humour (Martin & Lefcourt, 1984; Svebak, 1974; Ziv, 1979) neither confronted the subjects with humour stimuli nor recorded their responses. Instead these tests relied on self-description of aspects of humour behaviour occurring in everyday situations. The Situational Sense of Humour Questionnaire (SHRQ; Martin & Lefcourt, 1984) is the most mature representative of this latter approach.

The Situational Sense of Humour Questionnaire (Martin & Lefcourt, 1984)

The construction of the SHRQ involved describing daily life situations which ranged from general to specific, unstructured to structured, unusual to common and from unpleasant to pleasant. Subjects responded to these statements on a 1 to 5 scale indicating their frequency or intensity of outward signs of amusement, such as smiling or laughing. The reliability and validity of the SHRQ are good. The Cronbach alphas range between 0.70 and 0.85 and a one month test-retest reliability equals 0.70. Validity studies in the domain of humour are based on observations of facial reactions, peer ratings, and humour production (Lefcourt & Martin, 1986; Martin & Lefcourt, 1983). Furthermore, the SHRQ has been successful in predicting individual differences in the ability to cope with stress (Lefcourt & Martin, 1986; Martin & Lefcourt, 1983). Perhaps the greatest utility of the SHRQ is showing how sense of humour can ameliorate the effects of aversive events (Martin, Kuiper, Olinger & Dance, in press). However, the validity studies conducted so far did not include humour appreciation.

Appreciation of Humour

The assessment of the appreciation of humour should take into account the variety of humour stimuli and the variety of responses to humour. A factor analytic approach has been used to derive both a taxonomy of jokes and cartoons and of response dimensions (Ruch, in press). Three stimulus factors repeatedly emerged with this approach: Nonsense (NON) humour, incongruity-resolution (INC-RES) humour, and sexual (SEX) humour. The NON refers to a structural factor. It pertains to jokes and cartoons in which the incongruity is not resolvable, is only partially resolvable, or the resolution produces other incongruities. The other structural factor is INC-RES and describes jokes and cartoons in which the incongruity is resolvable. The structural factors are defined independent of joke content and may be represented by material from any theme. SEX, on the other hand, is a content factor and may be represented in either NON or INC-RES material. Furthermore, factor analyses of two sets of rating scales suggest that there are two practically orthogonal response dimensions involved in humour appreciation: funniness and aversiveness. The first factor covers all the positive responses to humour and the other represents the negative ones. Thus, appreciation is maximal when funniness is high and aversiveness is low. Minimal appreciation is characterized by low funniness and high aversiveness. The 3-Witze Dimensionen (Joke

Dimensions; 3-WD) Humour Test (Ruch, 1983) was constructed to assesses this two-mode model of humour appreciation.

The SHRQ and the Appreciation of Humour

In constructing the SHRQ there was an avoidance of the "... more nebulous quality of humour appreciation" (Lefcourt & Martin, 1986; p. 22). Yet humour appreciation may serve as a face valid criterion for the evaluation of the validity of the SHRQ as a test of "sense of humour". As a minimal requirement, any valid test of sense of humour should be able to predict individual differences in humour appreciation, independent of what the measure is based.

The concept underlying the SHRQ does not allow to for the prediction of differential appreciation of particular types of humour. Nevertheless, it can be hypothesized that a positive relationship exists between the SHRQ and humour appreciation once a comprehensive set of humour categories is used. Such evidence is partially provided by Deckers and Beuker (1987), who found a positive correlation between the SHRQ and rated funniness of cartoons. However, this pilot study used 20 subjects only, who were tested in a group setting. Furthermore, the stimulus material was not based on a comprehensive taxonomy of jokes and cartoons.

The purpose of the present study was to investigate the relationship between the SHRQ and humour appreciation as measured by the 3-WD Humour Test. The hypotheses tested cover both dimensions of humour appreciation, funniness and aversiveness. In detail, the SHRQ is expected to correlate positively with funniness and negatively with aversiveness of the humour material. Furthermore, the hypothesis will be tested at three levels of humour. At the broadest category level of humour, the SHRQ should correlate positively with the total of the three funniness scores and negatively with the total of the three aversiveness scores in the 3-WD. At an intermediate level, the SHRQ might correlate positively with appreciation of the three humour categories: INC-RES, NON, and SEX. Finally, at the level of individual jokes and cartoons the majority of the correlations should be positive, even if they do not reach statistical significance.

There is no explicit consideration of negative responses to the situations depicted in the SHRQ although some of them may be considered quite aversive. However, the lowest response category in the SHRQ frequently refers to a negative response quality ("I would not have found it particular amusing"). Hence, low scores in the SHRQ (i.e., frequent use of this response category) might correspond with elevated ratings on the aversiveness dimension. However, this small effect might be overpowered by the positive steps of the response scale suggesting that a negative correlation can be of small size only.

METHOD

Subjects. A sample of 206 students (mean age = 19.8, SD = 4.2) participated voluntarily in order to partially fulfil Introductory Psychology course requirements. Form A of the 3-WD Humour Test was filled out by 105 subjects and Form B by 101 subjects.

Materials. Subjects filled out the 21-item SHRQ (Martin & Lefcourt, 1984) and the 3-WD Humour Test. The first 18 SHRQ items presented various life situations, which the subject rated from 1 representing little amusement to 5 representing hearty laughter. Question 19 dealt with choosing friends, who are able to laugh while 20 and 21 dealt with the subject's consistency in exhibiting humour in various situations.

English translations of Forms A and B of the 3-WD Humour Test (Ruch, 1983) were employed. Each form consisted of 35 jokes and cartoons and represented NON, INC-RES and SEX humour. The first 5 items are not scored because they are assumed to be influenced by a warm-up effect. Each item was rated for funniness and for aversiveness on a 7-point scale: 0 = not at all funny or aversive to 6 = very funny or aversive. Six scores were derived from the test: three for funniness of each category and three for aversiveness of each category. Additionally, "total funniness" and "total aversiveness" scores were computed by adding the respective three category scores.

Procedure. Subjects were tested individually.

RESULTS

Correlations between the SHRQ and 3-WD Humour Test are presented in Table 1. On both Form A and B, funniness ratings based on the 3-WD total score or on each of the 3-WD category scores correlated positively with SHRQ scores, although these correlations did not reach significance. On both forms, aversiveness ratings based on the 3-WD total score or each of the three categories did not correlate consistently with SHRQ scores. None of these correlations reached significance.

Table 1. Correlations between the SHRQ and Humour Appreciation on the 3-WD Humour Test

	Funniness				Aversiveness			
3-WD	Total	INC-RES	NON	SEX	Total	INC-RES	NON	SEX
Form A	0.16	0.14	0.12	0.16	0.04	0.18	0.06	0.07
Form B	0.11	0.06	0.15	0.09	-0.09	-0.03	-0.08	-0.11

Out of the 60 individual jokes and cartoons from both 3-WD forms, funniness ratings of five (8.3%) correlated significantly with SHRQ scores. The aversiveness ratings of two (3.3%) correlated significantly positively and three (5.0%) correlated significantly negatively with SHRQ scores. Thus, individual jokes and cartoons did not significantly correlate more frequently than would be expected by chance. Regardless of statistical significance, funniness ratings of 50 jokes and cartoons correlated positively with the SHRQ and 10 correlated negatively, $\chi^2(1) = 26.6$, $P < 0.001$. Aversiveness ratings of 29 jokes and cartoons correlated positively with the SHRQ while a nearly equal number (31) correlated negatively.

DISCUSSION

Starting from the premise that any test of "sense of humour" should be able to account for individual differences in the realm of humour, it was expected that the SHRQ would correlate positively with appreciation of humour as reflected by funniness and aversiveness ratings of a heterogeneous set of humour stimuli. The results clearly showed, however, that subjects' SHRQ scores did not correlate with any of their 3-WD Humour Test scores. Thus, humour appreciation is not included in the area of validity of the SHRQ.

Nevertheless, the lack of correlation between the SHRQ and the 3-WD is noteworthy since it can not be accounted for by lack of reliability or validity of the measures. This finding indicates the multidimensionality of the area of humour. Both tests cover different domains of humour and are also located differently in the personality space. The SHRQ describes daily life situations including some which are neither incongruous nor prototypical of humour stimuli. Whereas laughter may occur in these situations, it may not be

accompanied by feelings of humour. As Lefcourt and Martin (1986) note "...laughter can occur in the absence of humour and humour is not always accompanied by laughter..." (pp. 2-3). The propensity to laugh is a characteristic of the typical extravert, who in general, likes to "... laugh and be merry" (Eysenck & Eysenck, 1975, p. 9). Not surprisingly, Ruch (1991) found that the SHRQ correlated 0.52 with extraversion as measured by the Eysenck Personality Inventory (Eysenck, Eysenck & Barrett, 1985).

The 3-WD Test, on the other hand, presents actual content valid humour stimuli, such as jokes and cartoons. In the 3-WD current subjective humour appreciation but not overt responses are measured. This difference in the response mode, however, cannot account for the lack of correlations observed since the amount of smiling/laughing induced by the 3-WD material and the judged funniness were shown to correlate highly positively (Ruch, 1990). Whereas the SHRQ is measuring a subtrait of extraversion, humour appreciation cannot be subsumed under extraversion. A review of studies showed that the correlations between the 3-WD scales and extraversion are consistently positive, however, like those for the SHRQ, the coefficients generally lack of both statistical and practical significance (Ruch, in press). The predictors of humour appreciation come from different locations in the personality space. Conservatism, intolerance of ambiguity, and experience seeking are potent predictors of appreciation of humour structure. Sexual interests, disinhibition, and toughmindedness are the predictors of appreciation of sexual content in humour.

Therefore, the present study may have attempted to correlate a measure of nonhumorous laughter with a measure of subjective humour experience. Consequently, no correlation was found. Nevertheless, Deckers and Beuker (1987) did find a positive correlation between SHRQ scores and funniness ratings of cartoons. A major difference between the two studies is that Deckers and Beuker tested all 20 of their subjects in one group setting while in the present study subjects were tested individually. It can be hypothesized, that there is an interactive effect of group setting and extraversion on humour appreciation: the group setting enhances humour appreciation of extraverts but not of introverts. Thus, it might be that the SHRQ, like Extraversion, does not predict humour appreciation under individual testing conditions, but predicts humour appreciation in social settings. This hypothesis is compatible with a variety of findings (Babad, 1974; Koppel & Sechrest, 1970; Levine & Rakusin, 1959) and should be tested in further investigations since it is basic for the understanding of the relationship between personality and humour appreciation.

Social influence and extraversion may also have affected the data originally used to validate the SHRQ (Lefcourt & Martin, 1986; Martin & Lefcourt, 1984). Extraversion may have influenced the SHRQ criterion variable of the number of witty comments made during various monologues. The number of witty comments correlated positively with the SHRQ. Making witty comments, however, also characterizes extraversion as measured by the EPQ item "Do you like telling jokes and funny stories to your friends?" (Eysenck et al., 1985). The SHRQ criterion variable of smiling and laughing was measured during a relaxed and informal interview or was based on peer ratings. For both measures, smiling and laughing correlated with SHRQ scores. When a subject was alone playing a video game, on the other hand, the incidence of negative (curses, frowns) and positive (smiles, chuckles) responses failed to correlate with SHRQ scores. All in all, it seems that humour research would profit from explicit consideration of different social settings and the inclusion of extraversion as a moderator variable.

A precautionary note regarding the present findings is that the 3-WD humour categories have not been validated in the United States although they have been in Austria, Germany, France and Turkey (Ruch, in press). If the categories are not valid for the population from which the current sample was drawn, then this may affect interpretation of the results at the

level of humour categories. It should not, however, affect interpretation of the total humour score nor the scores of individual jokes and cartoons.

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AUTHOR NOTE

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